

Application No.: 10/714,336

Docket No.: JCLA11475

REMARKS**Present Status of the Application**

The Office Action suggests a new title is required that is clearly indicative of the invention to which the claims are directed. The Office Action objects the claims 24, 31, and 38 because of informalities. The Office Action rejects the claims 24-26, 28, 30-33, 35, 37-39, 41, and 43 under 35 U.S.C. 103(a) as being unpatentable over Tao (US 6,316,828) in view of Stearns (US 5,895,967), Davidson (US 2003/0232463), and Yamaura (US 6,831,360). The Office Action rejects the claims 27, 34, and 40 under 35 U.S.C. 103(a) as being unpatentable over Tao in view of Stearns, Davidson, and Yamaura, and further in view of Liu (US 6,713,836). The Office Action rejects the claims 29, 36, and 42 under 35 U.S.C. 103(a) as being unpatentable over Tao in view of Stearns, Davidson, and Yamaura, and further in view of Brownfield (US 6,683,387).

In response thereto, Applicants have amended the title and the claims 24, 31, and 38 for clarity and formality. Applicants have also amended the claims 24, 31, and 38 by incorporating a feature that is supported by, for example, Fig. 2C, and the specification, paragraph [0017]. Applicants believe that the forging amendments do not introduce new matter. Thus, reconsideration of those claims is respectfully requested.

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Suggestions to the Title

The Office Action suggests a new title is required that is clearly indicative of the invention to which the claims are directed. In accordance with the suggestion, Applicants have amended the title of the application "Package substrate and process thereof (original)" to "Package substrate comprising metal layers on electrodes of passive component and power and ground pads of substrate".

Objections to the Claims

The Office Action objects the claims 24, 31, and 38 because of informalities. In accordance with the request, Applicants have amended the claims 24, 31, and 38 for formality. Accordingly, Applicants respectfully submit that the objection has been overcome and should be withdrawn.

Rejections to the Claims

The Office Action rejects the claims 24-26, 28, 30-33, 35, 37-39, 41, and 43 under 35 U.S.C. 103(a) as being unpatentable over Tao in view of Stearns, Davidson, and Yamaura.

The independent claim 24, as amended, recites as follows.

24. A package substrate adapted to carry a die of a wire bonding type, the package substrate at least comprising:

a substrate having a surface, a power pad, a ground pad and a signal pad, wherein the surface of the substrate has a die bonding area, and wherein the power pad, the ground pad and the signal pad are disposed outside the die bonding area;

at least one passive component disposed between the power pad and the ground pad, wherein the passive component has a power electrode connected to the power pad and a ground electrode connected to the ground pad;

a wire connecting the die bonding area and one electrode and not crossing over the passive component;

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a first continuous gold layer on the exposed surface of the power electrode and the exposed surface of the power pad;
a second continuous gold layer on the exposed surface of the ground electrode and the exposed surface of the ground pad; and
a third gold layer on the exposed surface of the signal pad.

(emphasis added)

The independent claims 31 and 38 recite the similar features.

The amended independent claims 24, 31, and 38 define the feature that the bonding wire connects the die bonding area and one electrode and not cross over the passive component. However, none of the cited references discloses or suggests the foregoing feature of the amended independent claims. Therefore, Applicants submit that the amended independent claims patently define over the cited references. Consequently, the dependent claims 25-30, 32-37, and 39-43 are patentably distinguishable over the cited references for at least the same reasons as the independent claims. Accordingly, reconsideration and withdrawal of the 103 rejections are respectively requested.

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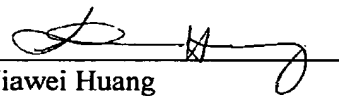
CONCLUSION

For at least the foregoing reasons, it is believed that the pending claims 24-43 are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

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Respectfully submitted,
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